

Grade 5

Unit 1

Whole Number Computation
And
Application

Student Workbook

HOMEWORK

Name:

Name _____

Date _____

1. Record the digits of the first factor on the top row of the place value chart. Draw arrows to show how the value of each digit changes when you multiply. Record the product on the second row of the place value chart. The first one has been done for you.

a. $4.582 \times 10 = \underline{45.82}$

			4	5	8	2
			↓	↓	↓	↓
			4	5	8	2

b. $7.281 \times 100 = \underline{\hspace{2cm}}$

c. $9.254 \times 1000 = \underline{\hspace{2cm}}$

- d. Explain how and why the value of the 2 changed in (a), (b), and (c).

2. Record the digits of the dividend on the top row of the place value chart. Draw arrows to show how the value of each digit changes when you divide. Record the quotient on the second row of the place value chart. The first one has been done for you.

a. $2.46 \div 10 =$ 0.246

				.			

Arrows showing value change: 2 (top row, 4th column) → 2 (bottom row, 5th column); 4 (top row, 5th column) → 4 (bottom row, 6th column); 6 (top row, 6th column) → 6 (bottom row, 7th column).

b. $678 \div 100 =$ _____

				.			

c. $67 \div 1000 =$ _____

				.			

- d. Explain how and why the value of the 6 changed in the quotients in (a), (b), and (c).

3. Researchers counted 8,912 monarch butterflies on one branch of a tree at a site in Mexico. They estimated that the total number of butterflies at the site was 1000 times as large. About how many butterflies were at the site in all? Explain your thinking and include a statement of the solution.
4. A student used his place value chart to show a number. After the teacher instructed him to divide his number by 100, the chart showed 28.003. Draw a picture of what the place value chart looked like at first.

				●			

- a. Explain how you decided what to draw on your place value chart. Be sure to include your reasoning about how the value of the digits was affected by the division.
5. On a map, the perimeter of a park is 0.251 meters. The actual perimeter of the park is 1000 times as large. What is the actual perimeter of the park? Explain how you know using a place value chart.

Name _____

Date _____

1. Solve.

a. $36,000 \times 10 =$ _____

e. $0.24 \times 100 =$ _____

b. $36,000 \div 10 =$ _____

f. $24 \div 1000 =$ _____

c. $4.3 \times 10 =$ _____

g. $4.54 \times 1000 =$ _____

d. $4.3 \div 10 =$ _____

h. $3045.4 \div 100 =$ _____

2. Find the products.

a. $14,560 \times 10 =$ _____

b. $14,560 \times 100 =$ _____

c. $14,560 \times 1000 =$ _____

d. Explain how you decided on the number of zeros in the products for (a), (b), and (c).

3. Find the quotients.

a. $1.65 \div 10 =$ _____

b. $1.65 \div 100 =$ _____

c. Explain how you decided where to place the decimal in the quotients in (a), (b), and (c).

4. Ted says that 3 tenths multiplied by 100 equal 300 thousandths. Is he correct? Use a place value chart to explain your answer.
5. Alaska has a land area of about 1,700,000 km². Florida has a land area $\frac{1}{10}$ the size of Alaska. What is the land area of Florida? Explain how you found your answer.

Name _____ Date _____

1. Write the following in exponential form (e.g., $100 = 10^2$).

a. $1000 =$ _____

d. $100 \times 10 =$ _____

b. $10 \times 10 =$ _____

e. $1,000,000 =$ _____

c. $100,000 =$ _____

f. $10,000 \times 10 =$ _____

2. Write the following in standard form (e.g., $4 \times 10^2 = 400$).

a. $4 \times 10^3 =$ _____

e. $6.072 \times 10^3 =$ _____

b. $64 \times 10^4 =$ _____

f. $60.72 \times 10^4 =$ _____

c. $5300 \div 10^2 =$ _____

g. $948 \div 10^3 =$ _____

d. $5,300,000 \div 10^3 =$ _____

h. $9.4 \div 10^2 =$ _____

3. Complete the patterns.

a. 0.02 0.2 _____ 20 _____ _____

b. 3,400,000 34,000 _____ 3.4 _____

c. _____ 8,570 _____ 85.7 8.57 _____

d. 444 4440 44,400 _____ _____ _____

e. _____ 9.5 950 95,000 _____ _____

4. After a lesson on exponents, Tia went home and said to her mom, “I learned that 10^4 is the same as 40,000.” She has made a mistake in her thinking. Use words, numbers or a place value chart to help Tia correct her mistake.
5. Solve $247 \div 10^2$ and 247×10^2 .
- a. What is different about the two answers? Use words, numbers or pictures to explain how the decimal point shifts.
- b. Based on the answers from the pair of expressions above, solve $247 \div 10^3$ and 247×10^3 .

Name _____

Date _____

1. Convert:

a. 5 meters to centimeters $5 \text{ m} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ cm}$

b. 60 centimeters to meters $60 \text{ cm} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ m}$

c. 2300 milliliters to liters. $2.3 \text{ l} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ ml}$

d. 0.462 liters to milliliters $0.462 \text{ l} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ ml}$

e. 80.4 kilometers to meters $\underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ m}$

f. 0.725 kilometers to meters $\underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ m}$

g. 456 grams to kilograms $\underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ kg}$

h. 0.3 kilograms to grams $\underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{ g}$

2. Read each aloud as you write the equivalent measures.

a. 2.7 km = $\underline{\hspace{2cm}} \text{ km} \underline{\hspace{2cm}} \text{ m}$

b. 3.46 l = $\underline{\hspace{2cm}} \text{ l} \underline{\hspace{2cm}} \text{ ml}$

c. 5.005 kg = $\underline{\hspace{2cm}} \text{ kg} \underline{\hspace{2cm}} \text{ g}$

d. 8 ml = $\underline{\hspace{2cm}} \text{ l}$

e. 4079 g = $\underline{\hspace{2cm}} \text{ kg}$

3. A dining room table measures 1.78 m long. Express this measurement in millimeters.
- a. Explain your thinking using a place value chart.
- b. Explain your thinking using an equation that includes an exponent.
4. Eric and YiTing commute to school every day. Eric walks 0.81 km and YiTing walks 0.65 km. How far did each of them walk in meters? Explain your answer using an equation that includes an exponent.
5. There were 9 children at a birthday party. Each child drank one 200 ml juice box. How many liters of juice did they drink altogether? Explain your answer using an equation that includes an exponent.

Name _____

Date _____

1. Fill in the blanks using your knowledge of place value units and basic facts.

a. 43×30

Think: 43 ones \times 3 tens = _____ tens

$43 \times 30 =$ _____

b. 430×30

Think: 43 tens \times 3 tens = _____ hundreds

$430 \times 30 =$ _____

c. 830×20

Think: 83 tens \times 2 tens = 166 _____

$830 \times 20 =$ _____

d. $4,400 \times 400$

_____ hundreds \times _____ hundreds = 176 _____

$4,400 \times 400 =$ _____

e. $80 \times 5,000$

_____ tens \times _____ thousands = 40 _____

$80 \times 5,000 =$ _____

2. Determine if these equations are true or false. Defend your answer using your knowledge of place value and the commutative, associative, and/or distributive properties.

a. 35 hundreds = 5 tens \times 7 tens

b. $770 \times 6 = 77 \times 6 \times 100$

c. 50 tens \times 4 hundreds = 40 tens \times 5 hundreds

d. $24 \times 10 \times 90 = 90 \times 2,400$

3. Find the products. Show your thinking. The first row gives some ideas for showing your thinking.

a. 5×5
 $= 25$

$$\begin{aligned} 5 \times 50 \\ &= 25 \times 10 \\ &= 250 \end{aligned}$$

$$\begin{aligned} 50 \times 50 \\ &= (5 \times 10) \times (5 \times 10) \\ &= (5 \times 5) \times 100 \\ &= 2,500 \end{aligned}$$

$$\begin{aligned} 50 \times 500 \\ &= (5 \times 5) \times (10 \times 100) \\ &= 25,000 \end{aligned}$$

b. 80×5

80×50

800×500

$8,000 \times 50$

c. 637×3

$6,370 \times 30$

$6,370 \times 300$

$63,700 \times 300$

4. A concrete stepping stone measures 20 inches square. What is the area of 30 such tiles?

5. A number is 42,300 when multiplied by 10. Find the product of this number and 500.

Name _____

Date _____

1. Round the factors to estimate the products.

a. $697 \times 82 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

A reasonable estimate for 697×82 is .

b. $5,897 \times 67 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

A reasonable estimate for $5,897 \times 67$ is .

c. $8,840 \times 45 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

A reasonable estimate for $8,840 \times 45$ is .

2. Complete the table using your understanding of place value and knowledge of rounding to estimate the product.

Factors	Rounded Factors	Estimate
a. $3,409 \times 73$	$3,000 \times 70$	210,000
b. $82,290 \times 240$		
c. $9,832 \times 39$		
d. 98 tens \times 36 tens		
e. 893 hundreds \times 85 tens		

3. The estimated answer to a multiplication problem is 800,000. Which of the following expressions could result in this answer? Explain how you know.

$8,146 \times 12$

$81,467 \times 121$

$8,146 \times 121$

$81,477 \times 1,217$

4. Fill in the blank with the missing estimate.

a. $751 \times 34 \approx \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = 24,000$

b. $627 \times 674 \approx \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = 420,000$

c. $7,939 \times 541 \approx \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = 4,000,000$

5. In a single season the New York Yankees sell an average of 42,362 tickets for each of their 81 home games. About how many tickets do they sell for an entire season of home games?

6. Raphael wants to buy a new car.

a. He needs a down payment of \$3,000. If he saves \$340 each month, about how many months will it take him to save the down payment?

b. His new car payment will be \$288 each month for five years. What is the total of these payments?

Name _____

Date _____



1. Draw a model then write the numerical expressions.

a. The sum of 21 and 4, doubled	b. 5 times the sum of 7 and 23
c. 2 times the difference between 49.5 and 37.5	d. The sum of 3 fifteens and 4 twos
e. The difference between 9 thirty-sevens and 8 thirty-sevens	f. Triple the sum of 45 and 55

2. Write the numerical expressions in words.

Expression	Words	The Value of the Expression
a. $10 \times (2.5 + 13.5)$		
b. $(98 - 78) \times 11$		
c. $(71 + 29) \times 26$		
d. $(50 \times 2) + (15 \times 2)$		

3. Compare the two expressions using $>$, $<$, or $=$. In the space beneath each pair of expressions, explain how you can compare without calculating. Draw a model if it helps you.

a. $93 \times (40 + 2)$		$(40 + 2) \times 39$
b. 61×25		60 twenty-fives minus 1 twenty-five

4. Larry claims that $(14 + 12) \times (8 + 12)$ and $(14 \times 12) + (8 \times 12)$ are equivalent because they have the same digits and the same operations.
- Is Larry correct? Explain your thinking.
 - Which expression is greater? How much greater?

Name _____

Date _____

1. Circle each expression that is not equivalent to the expression in
- bold**
- .

a. **37×19**

37 nineteens

 $(30 \times 19) - (7 \times 29)$ $37 \times (20 - 1)$ $(40 - 2) \times 19$ b. **26×35**

35 twenty-sixes

 $(26 + 30) \times (26 + 5)$ $(26 \times 30) + (26 \times 5)$ $35 \times (20 + 60)$ c. **34×89** $34 \times (80 + 9)$ $(34 \times 8) + (34 \times 9)$ $34 \times (90 - 1)$

89 thirty-fours

2. Solve using mental math. Draw a tape diagram and fill in the blanks to show your thinking. The first one was done for you.

a. $19 \times 50 =$ _____ fifties

50	50	50	...	50	50
1	2	3	...	19	20

Think: 20 fifties – 1 fifties

$$= (\text{_____} \times 50) - (\text{_____} \times 50)$$

$$= \text{_____} - \text{_____} = \text{_____}$$

b. $11 \times 26 =$ _____ twenty-sixes

Think: _____ twenty-sixes + _____ twenty-sixes

$$= (\text{_____} \times 26) + (\text{_____} \times 26)$$

$$= \text{_____} + \text{_____} = \text{_____}$$

c. $49 \times 12 = \underline{\hspace{2cm}}$ twelves

Think: $\underline{\hspace{1cm}}$ twelves – 1 twelves

$$= (\underline{\hspace{1cm}} \times 12) - (\underline{\hspace{1cm}} \times 12)$$

$$= \underline{\hspace{1cm}} - \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

d. $12 \times 25 = \underline{\hspace{2cm}}$ seventy-fives

Think: $\underline{\hspace{1cm}}$ twenty-fives + $\underline{\hspace{1cm}}$ twenty-fives

$$= (\underline{\hspace{1cm}} \times 25) + (\underline{\hspace{1cm}} \times 25)$$

$$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

3. Define the unit in word form and complete the sequence of problems as was done in Problems 3–4 in the lesson.

a. $29 \times 12 = 29 \underline{\hspace{2cm}}$

Think: 30 $\underline{\hspace{1cm}}$ – 1 $\underline{\hspace{1cm}}$

$$= (30 \times \underline{\hspace{1cm}}) - (1 \times \underline{\hspace{1cm}})$$

$$= \underline{\hspace{1cm}} - \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

b. $11 \times 31 = 31 \underline{\hspace{2cm}}$

Think: 30 $\underline{\hspace{1cm}}$ + 1 $\underline{\hspace{1cm}}$

$$= (30 \times \underline{\hspace{1cm}}) + (1 \times \underline{\hspace{1cm}})$$

$$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

c. $19 \times 11 = 19 \underline{\hspace{2cm}}$

Think: 20 $\underline{\hspace{1cm}}$ – 1 $\underline{\hspace{1cm}}$

$$= (20 \times \underline{\hspace{1cm}}) - (1 \times \underline{\hspace{1cm}})$$

$$= \underline{\hspace{1cm}} - \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

d. $50 \times 13 = 13 \underline{\hspace{2cm}}$

Think: 10 $\underline{\hspace{1cm}}$ + 3 $\underline{\hspace{1cm}}$

$$= (10 \times \underline{\hspace{1cm}}) + (3 \times \underline{\hspace{1cm}})$$

$$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

4. How can 12×50 help you find 12×49 ?
5. Solve mentally.
- a. $16 \times 99 =$ _____
- b. $20 \times 101 =$ _____
6. Joy is helping her father to build a deck that measures 14 ft by 19 ft. Find the area of the deck using a mental strategy. Explain your thinking.
7. The Lason School turns 101 years old in June. In order to celebrate, they ask each of the 23 classes to collect 101 items and make a collage. How many total items will be in the collage? Use mental math to solve. Explain your thinking.

Name _____

Date _____

1. Draw an area model then solve using the standard algorithm. Use arrows to match the partial products from the area model to the partial products in the algorithm.

a. $24 \times 21 =$ _____

$$\begin{array}{r} 24 \\ \times 21 \\ \hline \end{array}$$

b. $242 \times 21 =$ _____

$$\begin{array}{r} 242 \\ \times 21 \\ \hline \end{array}$$

2. Solve using the standard algorithm.

a. $314 \times 22 =$ _____

b. $413 \times 22 =$ _____

c. $213 \times 32 =$ _____

3. A young snake measures 0.23 m long. During the course of his lifetime, he will grow to be 13 times his current length. What will his length be when he's full grown?
4. Zenin earns \$142 per shift at his new job. During a pay period, he works 12 shifts. What would his pay be for that period?

Name _____

Date _____

1. Draw an area model, and then solve using the standard algorithm. Use arrows to match the partial products from your area model to the partial products in the algorithm.

a. $27 \times 36 =$ _____

$$\begin{array}{r} 27 \\ \times 36 \\ \hline \end{array}$$

b. $527 \times 36 =$ _____

$$\begin{array}{r} 527 \\ \times 36 \\ \hline \end{array}$$

2. Solve using the standard algorithm.

a. 649×53

c. 758×46

b. 496×53

d. 529×48

3. Each of the 25 students in Mr. McDonald's class sold 16 raffle tickets. If each ticket cost \$15, how much money did Mr. McDonald's students raise?
4. Jayson buys a car and pays by installments. Each installment is \$567 per month. After 48 months, Jayson owes \$1250. What was the total price of the vehicle?

Name _____

Date _____

1. Draw an area model, and then solve using the standard algorithm. Use arrows to match the partial products from your area model to the partial products in your algorithm.

a. $273 \times 346 =$ _____

2 7 3

 $\times \underline{346}$

b. $273 \times 306 =$ _____

2 7 3

 $\times \underline{306}$

- c. Both Parts (a) and (b) have three-digit multipliers. Why are there three partial products in (a) and only two partial products in (b)?

2. Solve by drawing the area model and using the standard algorithm.

a. $7,481 \times 290 =$ _____

b. $7,018 \times 209 =$ _____

3. Solve using the standard algorithm.

a. 426×357

c. 426×307

b. $1,426 \times 357$

d. $1,426 \times 307$

4. The Hudson Valley Renegades Stadium holds a maximum of 4,505 people. During the heights of their popularity, they sold out 219 consecutive games. How many tickets were sold during this time?

5. At the farmer's market, each of the 94 vendors makes \$502 in profit each weekend. How much profit will all vendors make on Saturday?

Name _____

Date _____

1. Estimate the product first. Solve by using the standard algorithm. Use your estimate to check the reasonableness of the product.

<p>a. 312×149</p> <p>$\approx 300 \times 100$ $= 30,000$</p> <p>$\begin{array}{r} 312 \\ \times 149 \\ \hline \end{array}$</p>	<p>b. 743×295</p>	<p>c. 428×637</p>
<p>d. 691×305</p>	<p>e. $4,208 \times 606$</p>	<p>f. $3,068 \times 523$</p>
<p>g. $430 \times 3,064$</p>	<p>h. $3,007 \times 502$</p>	<p>i. $254 \times 6,104$</p>

2. When multiplying 1,729 times 308, Clayton got a product of 53,253. Without calculating, does his product seem reasonable? Explain your thinking.
3. A publisher prints 1,912 copies of a book in each print run. If they print 305 runs, the manager wants to know about how many books will be printed. What's a reasonable estimate?

Name _____

Date _____

Solve.

1. Jeffery bought 203 sheets of stickers. Each sheet has a dozen stickers. He gave away 907 stickers to his family and friends on Valentine's Day. How many stickers does Jeffery have remaining?

2. During the 2011 season, a quarterback passed for 302 yards per game. He played in all 16 regular season games that year.
 - a. How many total yards did the quarterback pass for?

 - b. If he matches this passing total for each of the next 13 seasons, how many yards will he pass for in his career?

3. Bao saved \$179 a month. He saved \$145 less than Ada each month. How much would Ada save in three and a half years?

4. Mrs. Williams is knitting a blanket for her newborn granddaughter. The blanket is 2.25 meters long and 1.8 meters wide. What is the area of the blanket? Write the answer in centimeters.

5. Use the chart to solve.

Soccer Field Dimensions

	FIFA Regulation (in yards)	New York State High Schools (in yards)
Minimum Length	110	100
Maximum Length	120	120
Minimum Width	70	55
Maximum Width	80	80

- a. Write an expression to find the difference in the maximum area and minimum area of a NYS high school soccer field. Then evaluate your expression.
- b. Would a field with a width of 75 yards and an area of 7,500 square yards be within FIFA regulation? Why or why not?
- c. It costs \$26 to fertilize, water, mow, and maintain each square yard of a full size FIFA field (with maximum dimensions) before each game. How much will it cost to prepare the field for next week's match?

Name _____

Date _____

1. Divide. Draw number disks to show your thinking for (a) and (c). You may draw disks on your personal white board to solve the others if necessary.

a. $300 \div 10$	b. $450 \div 10$
c. $18,000 \div 100$	d. $730,000 \div 100$
e. $900,000 \div 1,000$	f. $680,000 \div 1,000$

2. Divide. The first one is done for you.

a. $18,000 \div 20$ = $18,000 \div 10 \div 2$ = $1,800 \div 2$ = 900	b. $18,000 \div 200$	c. $18,000 \div 2,000$
d. $420,000 \div 60$	e. $420,000 \div 600$	f. $420,000 \div 6,000$

g. $24,000 \div 30$	h. $560,000 \div 700$	i. $450,000 \div 9,000$

3. A stadium holds 50,000 people. The stadium is divided into 250 different seating sections. How many seats are in each section?
4. Over the course of a year, a tractor-trailer commutes 160,000 miles across America.
- a. Assuming a trucker changes his tires every 40,000 miles, and that he starts with a brand new set of tires, how many sets of tires will he use in a year?
- b. If the trucker changes the oil every 10,000 miles and he starts the year with a fresh oil change, how many times will he change the oil in a year?

Name _____

Date _____

1. Estimate the quotient for the following problems. The first one is done for you.

<p>a. $821 \div 41$</p> <p>$\approx 800 \div 40$</p> <p>$= 20$</p>	<p>b. $617 \div 23$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>c. $821 \div 39$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>
<p>d. $482 \div 52$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>e. $531 \div 48$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>f. $141 \div 73$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>
<p>g. $476 \div 81$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>h. $645 \div 69$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>i. $599 \div 99$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>
<p>j. $301 \div 26$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>k. $729 \div 81$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>l. $636 \div 25$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>

<p>m. $835 \div 89$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>n. $345 \div 72$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>	<p>o. $559 \div 11$</p> <p>\approx _____ \div _____</p> <p>$=$ _____</p>
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2. Mrs. Johnson spent \$611 buying lunch for 78 students. If all of the lunches were the same cost, about how much did she spend on each lunch?
3. An oil well produces 172 gallons of oil every day. A standard oil barrel holds 42 gallons of oil. About how many barrels of oil will the well produce in one day? Explain your thinking.

Name _____

Date _____

1. Estimate the quotient for the following problems. The first one is done for you.

<p>a. $8,328 \div 41$</p> <p>$\approx 8,000 \div 40$</p> <p>$= 200$</p>	<p>b. $2,109 \div 23$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>c. $8,215 \div 38$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>
<p>d. $3,861 \div 59$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>e. $2,899 \div 66$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>f. $5,576 \div 92$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>
<p>g. $5,086 \div 73$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>h. $8,432 \div 81$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>i. $9,032 \div 89$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>
<p>j. $2,759 \div 48$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>k. $8,194 \div 91$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>l. $4,368 \div 63$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>
<p>m. $6,537 \div 74$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>n. $4,998 \div 48$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>	<p>o. $6,106 \div 25$</p> <p>$\approx \underline{\hspace{2cm}} \div \underline{\hspace{2cm}}$</p> <p>$= \underline{\hspace{2cm}}$</p>

2. 91 boxes of apples hold a total of 2,605 apples. Assuming each box has about the same number of apples, estimate the number of apples in each box.
3. A wild tiger can eat up to 55 pounds of meat in a day. About how many days would it take for a tiger to eat the following prey?

Prey	Weight of Prey	Number of Days
Eland Antelope	1,754 pounds	
Boar	661 pounds	
Chital Deer	183 pounds	
Water Buffalo	2,322 pounds	

Name _____

Date _____

1. Divide, then check using multiplication. The first one is done for you.

a. $71 \div 20$

Check:

$$\begin{array}{r} 3 \text{ R } 11 \\ 20 \overline{) 71} \\ \underline{60} \\ 11 \end{array}$$

$20 \times 3 = 60$

$60 + 11 = 71$

b. $90 \div 40$

c. $95 \div 60$

d. $280 \div 30$

e. $437 \div 60$

f. $346 \div 80$

2. A number divided by 40 has a quotient of 6 with a remainder of 16. Find the number.
3. A shipment of 288 textbooks has been delivered. Each of the 10 classrooms will receive an equal share of the books, with any extra books being stored in the bookroom. After the texts have been distributed to the classrooms, how many will be stored in the bookroom?
4. How many sixties are in two hundred forty-four?

Name _____ Date _____

1. Divide, then check with multiplication. The first one is done for you.

a. $72 \div 31$

d. $67 \div 19$

$$\begin{array}{r} 31 \overline{) 72} \quad \text{R } 10 \\ \underline{62} \\ 10 \end{array}$$

Check:

$31 \times 2 = 62$

$62 + 10 = 72$

b. $89 \div 21$

e. $79 \div 25$

c. $94 \div 33$

f. $83 \div 21$

2. A 189-square-foot rectangular office has a length of 21 feet. What is the width of the office?
3. While preparing for a morning conference, Principal Corsetti is laying out 15 dozen bagels on square plates. Each plate can hold 14 bagels.
- a. How many plates of bagels will Mr. Corsetti have?
- b. How many more bagels would be needed to fill the final plate with bagels?

Name _____

Date _____

1. Divide, then check using multiplication. The first one is done for you.

a. $129 \div 21$

$$\begin{array}{r} 6 \text{ R } 3 \\ 21 \overline{) 129} \\ \underline{- 126} \\ 3 \end{array}$$

Check:

$$21 \times 6 = 126$$

$$126 + 3 = 129$$

b. $158 \div 37$

c. $261 \div 49$

d. $574 \div 82$

e. $464 \div 58$

f. $640 \div 9$

2. It takes Juwan exactly 35 minutes by car to get to his grandmother's. The nearest parking area is a 4-minute walk from her apartment. One week he visited more often. He realized that he spent 5 hours and 12 minutes traveling to her apartment and then back home. How many round trips did he make to visit his grandmother?
3. How many eighty-fours are in 672?

Name _____

Date _____

1. Divide, then check using multiplication. The first one is done for you.

a. $487 \div 21$

$$\begin{array}{r} 23 \text{ R}4 \\ 21 \overline{) 487} \\ \underline{- 42} \\ 67 \\ \underline{- 63} \\ 4 \end{array}$$

Check:

$$21 \times 23 = 483$$

$$483 + 4 = 487$$

b. $485 \div 15$

c. $700 \div 21$

d. $399 \div 31$

e. $820 \div 42$

f. $908 \div 56$

2. When dividing 2,458 by 51, a student finds a quotient of 48 with a remainder of 11. Check the student's work, and use the check to find the error in their solution.

3. A baker was going to arrange 432 desserts into rows of 28. The baker divides 432 by 28 and gets a quotient of 15 with remainder 12. Explain what the quotient and remainder represent.

Name _____

Date _____

1. Divide, then check using multiplication.

a. $9,962 \div 41$

b. $1,495 \div 45$

c. $6,691 \div 28$

d. $2,625 \div 32$

e. $2,409 \div 19$

f. $5,821 \div 62$

2. A political gathering in South America held 788 people. Each of South America's 14 countries were equally represented. The remaining people were guests from the United States. How many guests were from the United States?
3. A chocolate company is packaging 32 ounces of caramels into reusable, plastic cups. When a shipping box is filled with these caramel packages, it weighs 49 pounds 8 ounces.
- a. How many caramel filled cups are in the box?
- b. Use your remainder to find the weight of each plastic cup.

Name _____

Date _____

1. Mr. Rice needs to replace the 166.25 ft of edging on the flower beds in his backyard. The edging is sold in length of 19 ft each. How many lengths of edging will he need to purchase?
2. Olivia is making granola bars and will use 17.9 oz of pistachios, 12.6 oz of almonds, 12.5 oz of sunflower seeds, and 12.5 oz of cashews. This amount makes 25 bars. What is the total amount of nuts in each bar?
3. Adam has 16.45 kg of flour and he uses 6.4 kg to make hot cross buns. The remaining flour is exactly enough to make 15 batches of scones. How much flour will be in each batch?

4. There are 90 fifth grade students going on a field trip. Each one pays the teacher \$9.25 to cover admission to the theater and lunch. Admission for the students will cost \$315 and each one gets and equal amount to spend on lunch. How much will each fifth grader be able to spend on lunch?
5. Ben is making math manipulatives to sell. He needs to make at least \$450. Each manipulative costs \$18 to make. He is selling them for \$30 each. What is the minimum number he can sell to reach his goal?

Name _____

Date _____

Directions: Solve the word problems using the bar model.

1. Michelle wants to save \$150 for a trip to Six Flags Amusement Park. If she saves \$12 each week, how many weeks will it take her to save enough money for the trip?
2. Karen works for 85 hours over a two week period. She earns \$1,891.25 over this period. How much does Karen earn for 8 hours of work?
3. The area of a rectangle is 256.5 m^2 . If the length is 18 m, what is the perimeter of the rectangle?

4. Tyler baked 702 cookies. He sold them in boxes of 18. After selling all the boxes of cookies, he earned \$136.50. What was the cost of one box of cookies?
5. A park is 4 times as long as it is wide. If the distance around the park is 12.5 kilometers, what is the area of the park?